UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,892	12/06/2005	Michael Singh	SD/3-22346/A/PCT	2858

324 7590 03/20/2009

JoAnn Villamizar
Ciba Corporation/Patent Department
540 White Plains Road
P.O. Box 2005
Tarrytown, NY 10591

EXAMINER	
MCCLENDON, SANZA L	
ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
03/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,892	SINGH, MICHAEL	
	Examiner	Art Unit	
	Sanza L. McClendon	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on November 21, 2008, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claim 12. Please be advised that the examiner of record has changed the new examiner is Sanza L. McClendon. The new examiner's contact information will be provided at the bottom of this office action.

Response to Arguments

2. Applicant's arguments with respect to claims 11 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland et al (4,999,869) in view of Kraemer et al (4,039,413).

5. Holland et al sets forth graft copolymers based on polyalkylene oxides for use as pre-treatments for textiles, said pre-treatment is described as having soil releasing

properties—column 1, lines 5-21. The polyalkylene oxide graft copolymer is obtained via free radical polymerization in the presence of a grafting monomer, wherein said grafting monomer is a vinyl ester derived from a saturated mono-carboxylic acid and/or a methyl or ethyl ester of (meth) acrylic acid. The polyalkylene oxide can be dissolved in the grafting monomer and adding the polymerization initiator and polymerizing. Said polymerization can take place in the presence of a free radical initiator, such as peroxide or by high energy radiation, such as electron beam. Said grafting monomers can be found in column 3, lines 32-44, wherein these are ethylenically unsaturated compounds. The difference between the instantly claimed invention and the prior art is the addition of a type II photoinitiator. However, it is known in the art of photopolymerization the use of peroxide with a photosensitizer (Type II photoinitiator) can be used as an alternative to thermal polymerization methods such as taught by Kraemer et al--col. 11, lines 3-7. Kraemer et al sets forth method of grafting polypeptides to a polymeric carrier (substrate) by irradiation with light. Kraemer et al set forth the irradiation with electron beam sometimes can destroy either the substrate (carrier molecule) or the grafting monomer and the use of a photosensitizer such as type II photoinitiator and a hydrogen source or the use of a photosensitizer and a peroxide both of which use actinic radiation or the use a peroxide at low temperatures can be used--see column 7, lines 59 thru column 11, line 7. Holland et al and Kraemer et al are analogous art because they are from the same field of endeavor that is the art of graft modifying carrier substrates with ethylenically unsaturated compounds. Therefore the examiner deems that it would have been within the skill level of an ordinary artisan, at the time of the invention, to use the alternative method of curing, i.e., peroxide with a photosensitizer, as taught Kraemer et al in the grafting method of Holland et al. The motivation would have been a reasonable expectation of stopping polymerization on command and/or a reasonable expectation of a faster curing time in the absence of evidence to the contrary and/or unexpected results, wherein Kraemer et al teaches the polymerization reaction when curing with light ceases when the light is removed from the reaction vessel (see column 10, lines 65-66).

Regarding the limitation "polymeric surfactant", it is deemed that Holland et al does not expressly teach/state polymeric surfactant. However, Holland et al teaches

said graft copolymer is used as a grayness inhibitor in the washing of synthetic textiles, wherein grayness is deemed to be caused by re-deposition of soil particles and greases on the wash (textile) while washing. The examiner deems this teaching is a surfactant; reducing the interfacial tension between a solid and a liquid (soil particles and greases in solvent (water in washing machine) such that the solids portion does not re-deposited onto the textile during/after treating (washing).

6. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kud et al (4,846,995) in view of Kraemer et al (4,039,413).

7. Kud et al sets forth graft copolymers based on polyalkylene oxides for use as pre-treatments for textiles, said pre-treatment is described as having soil releasing properties—column 1, lines 5-21. The polyalkylene oxide graft copolymer is obtained via free radical polymerization in the presence of a grafting monomer, wherein said grafting monomer is a vinyl ester derived from a saturated mono-carboxylic acid and/or a methyl or ethyl ester of (meth) acrylic acid. The polyalkylene oxide can be dissolved in the grafting monomer and adding the polymerization initiator and polymerizing. Said polymerization can take place in the presence of a free radical initiator, such as peroxide or by high energy radiation, such as electron beam—see column 3, lines 1-7. Said grafting monomers can be found in column 2, lines 67 to the end, wherein these are ethylenically unsaturated compounds. The difference between the instantly claimed invention and the prior art is the addition of a type II photoinitiator. However, it is known in the art of photopolymerization the use a peroxide with a photosensitizer (Type II photoinitiator) can be used as an alternative to thermal polymerization methods such as taught by Kraemer et al--col. 11, lines 3-7. Kraemer et al sets forth method of grafting polypeptides to a polymeric carrier (substrate) by irradiation with light. Kraemer et al set forth the irradiation with electron beam sometimes can destroy either the substrate (carrier molecule) or the grafting monomer and the use of a photosensitizer such as type II photoinitiator and a hydrogen source or the use of a photosensitizer and a peroxide both of which use actinic radiation or the use a peroxide at low temperatures can be used--see column 7, lines 59 thru column 11, line 7. Kud et al and Kraemer et al are analogous art because they are from the same field of endeavor that is the art of graft modifying

carrier substrates with ethylenically unsaturated compounds. Therefore the examiner deems that it would have been within the skill level of an ordinary artisan, at the time of the invention, to use the alternative method of curing, i.e., peroxide with a photosensitizer, as taught Kraemer et al in the grafting method of Kud et al. The motivation would have been a reasonable expectation of stopping polymerization on command and/or a reasonable expectation of a faster curing time in the absence of evidence to the contrary and/or unexpected results, wherein Kraemer et al teaches the polymerization reaction when curing with light ceases when the light is removed from the reaction vessel (see column 10, lines 65-66).

Regarding the limitation "polymeric surfactant", it is deemed that Kud et al does not expressly teach/state polymeric surfactant. However, Kud et al teaches said graft copolymer is used as a grayness inhibitor in the washing of synthetic textiles, wherein grayness is deemed to be caused by re-deposition of soil particles and greases on the wash (textile) while washing. The examiner deems this teaching is a surfactant; reducing the interfacial tension between a solid and a liquid (soil particles and greases in solvent (water in washing machine) such that the solids portion does not re-deposited onto the textile during/after treating (washing).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/
Primary Examiner,
Art Unit 1796

SMc